EXHIBIT 4

(12) United States Patent

Burchetta et al.

(10) Patent No.:

US 6,954,741 B1

(45) Date of Patent:

*Oct. 11, 2005

COMPUTERIZED DISPUTE RESOLUTION SYSTEM AND METHOD

- (75) Inventors: James D. Burchetta, New York, NY (US); Charles S. Brofman, Waccabuc,
 - NY (US)
- Assignee: Cybersettle.com, Inc., New York, NY (US)
- (*) Notice:
 - Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

- (21) Appl. No.: 09/370,394
- (22) Filed: Aug. 6, 1999

Related U.S. Application Data

- Continuation-in-part of application No. 09/130,154, filed on Aug. 6, 1998, now Pat. No. 6,330,551.
- (51) Int. Cl.⁷ G06F 17/60

References Cited (56)

U.S. PATENT DOCUMENTS

3,573,747 A	*	4/1971	Adams et al 705/37
3,581,072 A	*	5/1971	Nymeyer et al 705/37
5,077,665 A	*	12/1991	Silverman et al 705/37
5,329,589 A	*	7/1994	Fraser et al 379/91.02
5,495,412 A	*	2/1996	Thiessen 705/1
5,668,953 A	*	9/1997	Sloo 705/1
5,689,652 A	*	11/1997	Lupien et al 705/37
5,794,207 A	*	8/1998	Walker et al 705/1
5,895,450 A	*	4/1999	Sloo 705/1
5,905,975 A	*	5/1999	Ausubel 705/37
5,924,082 A	*	7/1999	Silverman et al 705/37
5,956,687 A	*	9/1999	Wamsley et al 705/1
5,983,205 A	*	11/1999	Brams et al 705/37

6,052,674	Α	*	4/2000	Zervides et al 705/40
6,112,181	A	*	8/2000	Shear et al 705/1
6,112,189	A	*	8/2000	Rickard et al 705/37
6,131,087	A	*	10/2000	Luke et al 705/26
6,141,653	Α	*	10/2000	Conklin et al 705/80
6,208,973	B1	*	3/2001	Boyer et al 705/2
6,243,691	B1	*	6/2001	Fisher et al 705/37
6,330,551	B1	*	12/2001	Burchetta et al 705/80
6,366,925	B1	*	4/2002	Meltzer et al 705/1
6,401,080	B1	*	6/2002	Bigus et al 705/37
2002/0007362	A1	*	1/2002	Collins et al 707/5

FOREIGN PATENT DOCUMENTS

WO-97/04410 A1 * 2/1997 wo WO-97/15362 A1 * 5/1997 WO

OTHER PUBLICATIONS

The International Dictionary of Applied Mathematics, Van Nostrand, Princeton, 1960, p. 593.*

Zeng, D.-Z. et al., "Intrinsic Gap and Final-Double-Offer Arbitration," in IFAC Large Scale Systems (conference proceedings), 1992.*

Zeng, D.-Z. et al., "Double-offer Arbitration," Mathematical Social Sciences, vol. 31, No. 3, pp. 147-170, Jun. 1996.* Abstract of New York Times editorial, Tuesday, Jan. 8,

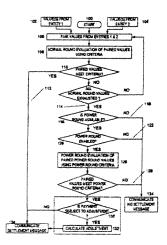
(Continued)

Primary Examiner-Nicholas D. Rosen (74) Attorney, Agent, or Firm-Greenberg Traurig LLP

(57)**ABSTRACT**

A method and system for automated dispute resolution is disclosed. The method and system are used in testing non-equal values in normal rounds for satisfaction of a condition. If the condition is not satisfied in the normal rounds, power round values are tested for satisfaction of a power round condition. If the power round condition is satisfied, a binding settlement payment is calculated. Additional options involve an automated facilitator, windfalls to initiators, automatic payment initiation, multiparty aggregation and automatic settlement document generation.

80 Claims, 7 Drawing Sheets



Page 2

OTHER PUBLICATIONS

Hines, B.L., "Arbitration Spells Relief," Best's Review—Property-Casualty Insurance Edition, vol. 86, p. 47, Jan. 1986.*

Colen, F.H., "Proactive Patent Protection," High Technology Business, vol. 9, No. 8, p. 14, Sep.-Oct., 1989.*

SchWeber, C., "Your Telephone May Be a Party Line," Mediation Quarterly, vol. 7, No. 2, pp. 191–195, Winter 1989 *

Denenberg, T.S., "The Electronic Arbitrator," Arbitration Journal, vol. 45, No. 1, pp. 48-52, Mar. 1990.*

Low, "Mediation vs. Litigation: How You Can Cut Costs," Texas Banking, vol. 80, No. 5, pp. 8-9, May 1991.*

Thiessen, E.M., et al., "Computer Assisted Negotiation of Multiobjective Water Resources Conflicts," Water Resources Bulletin vol. 28, No. 1, pp. 163–177, Jan./Feb. 1992.*

Brams, S.J. and Merrill, S., "Arbitration Procedures with the Possibility of Compromise," Control and Cybernetics, vol. 21, No. 1 pp. 131–149, 1992.*

Mullins, R., "Mediation, Arbitration Venues Offer Corporate Litigants Justice-in-Time," Business Journal-Milwaukee, vol. 9, No. 39, p. S6, Jul. 4, 1992.*

Yeend, N.N., "electronic Alternative Dispute Resolution System Design," Mediation Quarterly, vol. 11, No. 2, pp. 193–194, Winter 1993.*

Jackson, W., "Mediation Proposed for Securities Disputes," Business First-Columbus, vol. 9, No. 31, p. 4, Apr. 5, 1993.* Anon., "Title IV—Judicial Reforms," Health Legislationand Regulation, vol. 20, No. 3, Jan. 19, 1994.*

Skrzycki, C., "Writing Rules in Cyberspace," "The Regualtors: An Electronic Negotiation—Modem Times: OSHA to Try Writing rules in Cyberspace," The Washington Post, Feb. 8, 1994, p. D1.*

Helie, J., "Conflict and Conflict Resolution on Electronic Networks," Jun. 1994.*

SchWeber, C., "The Use of Technology in conflict Resolution," paper presented at the European Conference on Peacemaking and Conflict Resolution, Oct. 1994, San Sebastian, Spain.*

Macduff, I., "Flames on the Wires: Mediating from an Electronic Cottage," Negotiation Journal, vol. 10, No. 1, pp. 5-15, Januar 1994.*

Grob, K., et al., "Discovering Opportunities in Alternative Dispute Resolution: A Step-by-Step Guide for Getting Involved," Outlook, vol. 62, No. 4, p. 18, Winter 1995.* Stephenson, M.R., "Rescuing ADR from its Advances," Public Administration Review, vol. 55, No. 4, pp. 385-388, Jul./Aug. 1995.*

Anon. "Online Courtroom Service Introduced for US Disputers," Internet Business News, Jul. 1, 1996.*

Anon., "Pru Settlement Stalls State ADR Plan," Insurance Regulator, vol. 8, No. 37, p. 1, Sep. 30, 1996.*

Robbins, S.B., "Lowering the Cost of Doing Business through ADR," Distribution, vol. 96, No. 11, pp. 58–59, Oct. 1997.*

Hill, R., "Will Cyberspace Use Cybercourts?" International Commercial Litigation, Issue 23, pp. 33-35, Oct. 1997.*

Mandell, J., "Cyberspace Conflicts," Software Magazine, vol. 18, No. 4, p. 20, Mar. 1998.*

Negussie, M.M., "How to Select a Mediator," Defense Counsel Journal, vol. 65, No. 2, pp. 256–261, Apr. 1998.* Anon., "Pharamcists' Antitrust Class-Action Lawsuit Opens," Marketletter, Oct. 5, 1998.*

Online Ombuds Office Web site, http://aaron.sbs.umass.edu/center/ombuds/default.htm and?description.html, Apr. 14, 2000.*

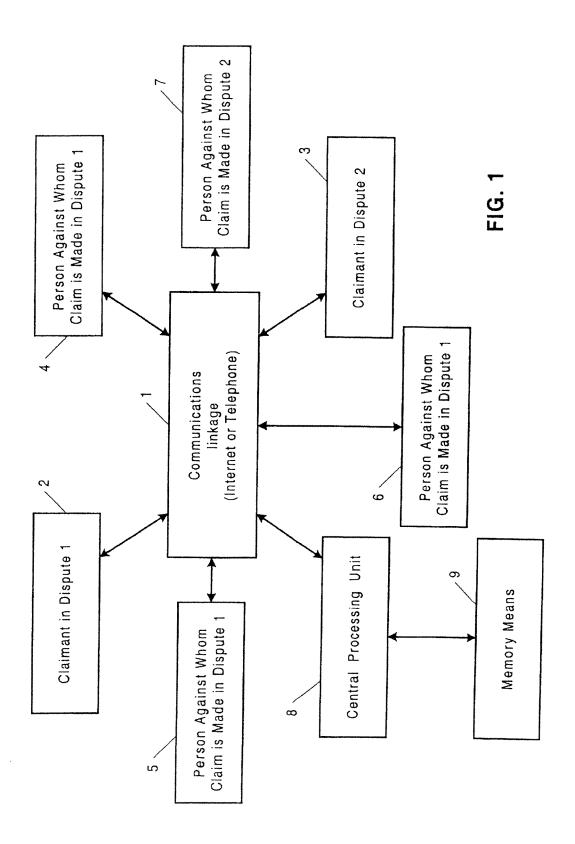
Levin, A., "Online Claim Settlement Services Hit the Net," Nov. 9, 1998.*

* cited by examiner

U.S. Patent

Oct. 11, 2005

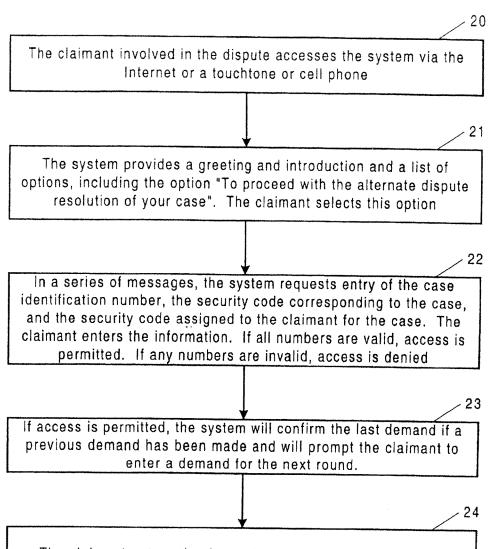
Sheet 1 of 7



Oct. 11, 2005

Sheet 2 of 7

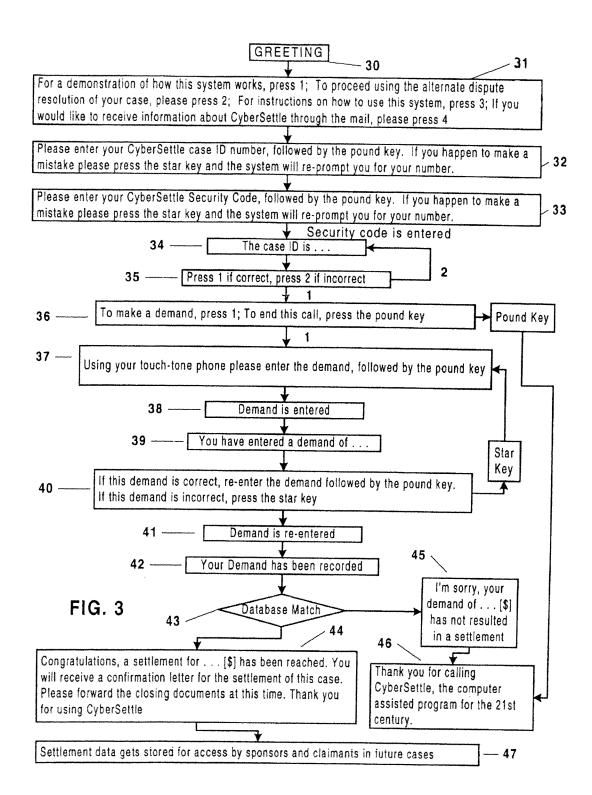
US 6,954,741 B1



The claimant enters the demand and the comparison means compares the demand with the offer for the corresponding round recorded in the memory means. If the demand and offer match, the communication means announces to the claimant that the case has been settled, and the person against whom the claim is made is also notified, and the settlement data gets stored in the memory means for access by sponsors and claimants in establishing the settlement value of future cases. If the demand and offer do not match, the communication means announces that the demand was not accepted and the demand and offer for that round are deleted. If no offer for the corresponding round has been previously recorded, the demand remains stored in the memory means.

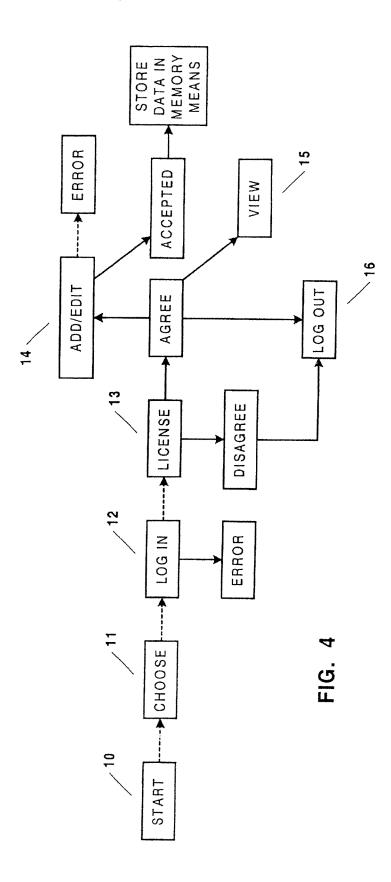
Oct. 11, 2005

Sheet 3 of 7



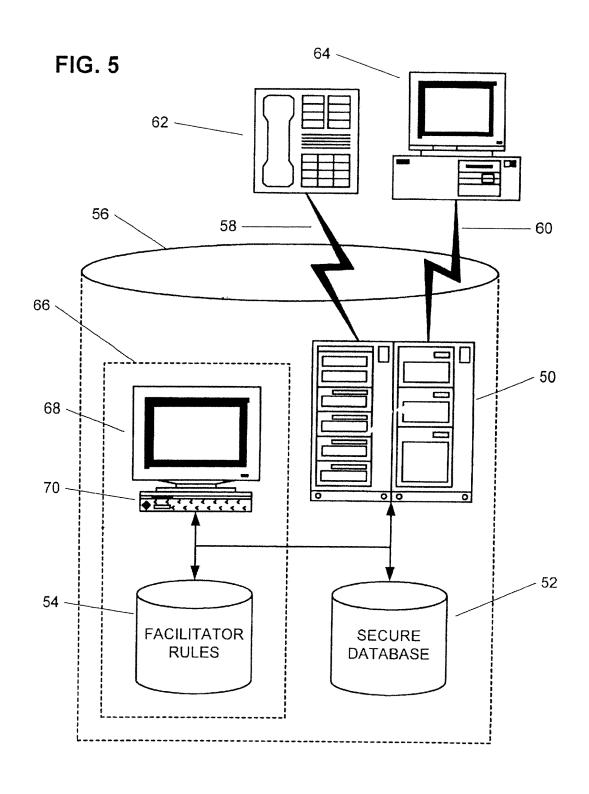
Oct. 11, 2005

Sheet 4 of 7



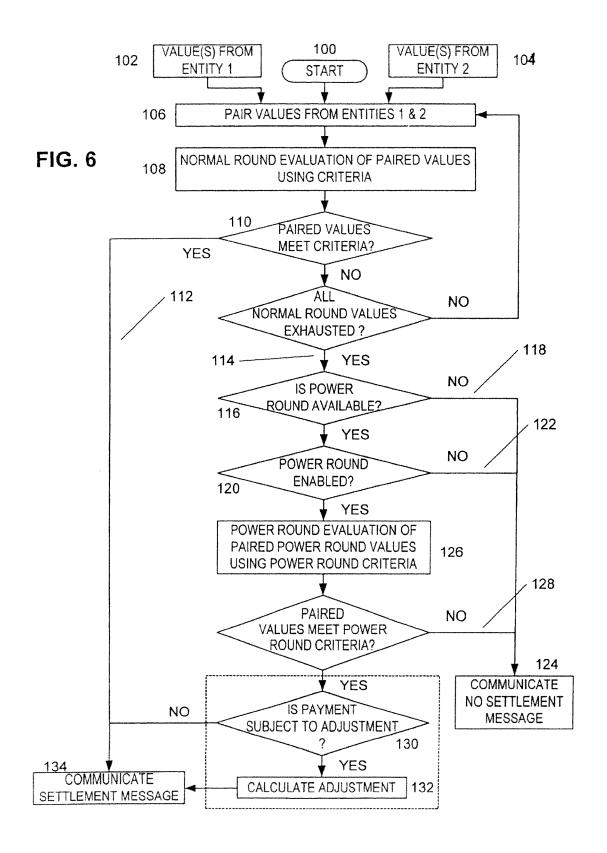
Oct. 11, 2005

Sheet 5 of 7



Oct. 11, 2005

Sheet 6 of 7



U.S. Patent Oct. 11, 2005 Sheet 7 of 7

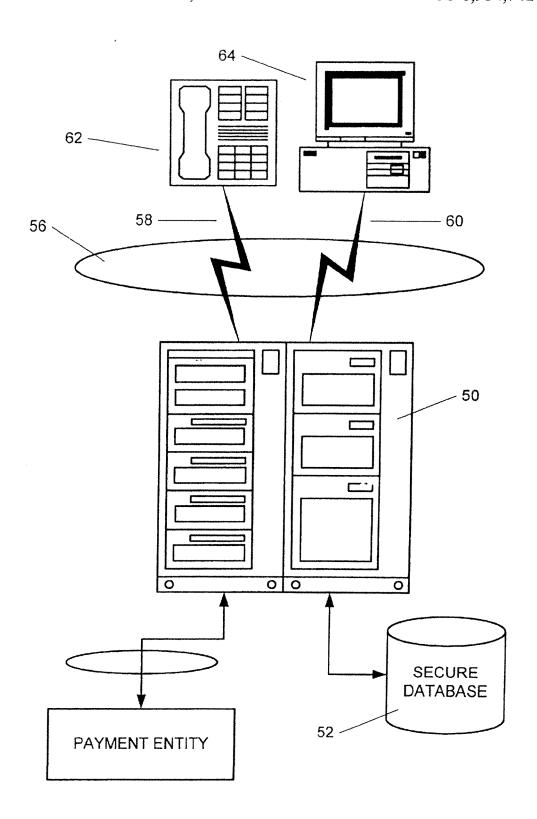


FIG. 7

1

COMPUTERIZED DISPUTE RESOLUTION SYSTEM AND METHOD

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of application Ser. No. 09/130,154 filed Aug. 6, 1998; now U.S. Pat. No. 6,330,551 incorporated herein by reference.

FIELD OF THE INVENTION

This invention relates generally to dispute resolution and more particularly to on-line automated dispute resolution among adverse parties in a confidential environment.

BACKGROUND OF THE INVENTION

At the present time, it is readily apparent that a better way to resolve disputes has long been needed. Courtroom trials, once thought to be the only way to resolve legal controversies, are very costly and the outcome can be 20 unsatisfactory for all concerned parties. The resulting disappointment with traditional litigation drove the creation of the alternative dispute resolution ("ADR") industry. However, conventional ADR, although sometimes helpful, is still costly and the results are often unacceptable.

An untold number of pending claims are ripe for settlement, but have not been resolved for reasons that have nothing to do with their merits. The present invention is based on the premise that the parties are best suited to settle those disputes but need a system that creates the opportunity for parties to successfully settle their claims easily, effectively, and inexpensively.

SUMMARY OF THE INVENTION

In general, in a first aspect, the invention features a claim resolution method. The method involves testing pairs of non-equal values, submitted by two adverse parties for a claim, for satisfaction of a condition. If the condition is not satisfied, the method further involves testing a pair of non-equal power round values, one from each of the two adverse parties for the claim, for satisfaction of a power round condition. The method further involves calculating a binding settlement payment, when the condition is satisfied by the a pair of the non-equal values. The binding settlement payment is an amount at least equal to a lower of the pair of the non-equal values.

In general, in a second aspect, the invention features a claim resolution method. The method involves receiving values, submitted by two adverse parties for a claim. At least one of the values is submitted following a communication of a facilitating message regarding the claim, conveyed from a facilitator to at least one of the two adverse parties. The method further involves testing the pairs of non-equal values for satisfaction of a condition, and calculating a binding settlement payment, when the condition is satisfied by a pair of the non-equal values. The binding settlement payment is an amount at least equal to a lower of the pair of the non-equal values.

In general, in a third aspect, the invention features a 60 dispute resolution method for resolving a claim between two adverse parties. The method involves testing pairs of non-equal values, submitted by the two adverse parties for the claim, for satisfaction of a condition. The method further involves calculating a binding settlement payment, when the 65 condition is satisfied by a pair of the non-equal values. The binding settlement payment incorporates a windfall

2

adjustment, when one of the parties is a dispute entry initiator for the claim, in an amount at least equal to a lower of the pair of the non-equal values adjusted by either a positive or negative windfall differential amount.

In general, in a fourth aspect, the invention features a dispute resolution method for resolving a claim between two adverse parties. The method involves testing pairs of non-equal values, submitted by the two adverse parties for the claim, for satisfaction of a condition. The method further involves calculating a binding settlement payment, when the condition is satisfied by a pair of the non-equal values, of an amount at least equal to a lower of the pair of the non-equal values, and initiating an on-line transfer of funds between the parties for the amount.

In general, in a fifth aspect, the invention features a dispute resolution method for resolving a claim between two adverse parties. The method involves testing pairs of non-equal values, submitted by the two adverse parties for the claim, for satisfaction of a condition. The method further involves calculating a binding settlement payment, when the condition is satisfied by a pair of the non-equal values, of an amount at least equal to a lower of the pair of the non-equal values. The method further involves automatically, when the condition is satisfied, generating a settlement document for the claim containing case specific information.

In general, in a sixth aspect, the invention features systems which operate according to the disclosed techniques via an on-line interface.

Particular embodiments of the invention may feature one 30 or more of the following advantages: lower cost for each party from initiation through resolution, versus a litigation: or an increased probability of settlement for some claims; encouragement that the case may settle; some indication that a settlement may actually be reached; higher customer satisfaction with the claim resolution; attraction of a higher number of claims to the system; lower coat to initiators relative to hiring a lawyer to engage the system or file and prosecute a lawsuit; greater comfort for claimants engaging the system because the legal knowledge necessary to draft a simple dismissal, release or settlement agreement is not needed; lower cost because an attorney is not needed or minimally needed to memorialize the settlement; consolidation and simplification of multiparty negotiations into effectively a two party negotiation; greater flexibility for claimants since they control the particular method of payment; faster receipt of settlement proceeds; or smaller likelihood of post settlement defaults by defendants.

Particular embodiments of systems incorporating the invention may feature one or more of the following additional advantages: the ability for individuals to directly contact and engage in a dispute resolution negotiation; the ability to receive an immediate or direct crediting, transfer or initiation of a transfer of the value arrived at through the settlement negotiation; or the ability to receive a windfall adjustment if a negotiation results in a settlement by being an initiator.

The above advantages and features are of representative embodiments only, and are presented only to assist in understanding the invention. It should be understood that they are not to be considered limitations on the invention as defined by the claims, or limitations on equivalents to the claims. For instance, some pairs of these advantages are mutually contradictory, in that they cannot be simultaneously present in a single embodiment. Similarly, some advantages are applicable to one aspect of the invention, and inapplicable to others. Thus, this summary of features and advantages should not be considered dispositive in deter-

mining equivalence. Additional features and advantages of the invention will become apparent in the following description, from the drawings, and from the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

The following detailed description may best be understood by reference to the following description in conjunction with the accompanying drawings in which:

FIG. 1 is an overview of the computerized system usable $_{10}$ to implement the present invention.

FIG. 2 is a block diagram showing how a claimant involved in a dispute interacts with the computerized system of FIG. 1.

FIG. 3 is a block diagram of an example of how an 15 embodiment prompts a person involved in a dispute in the use of the system.

FIG. 4 is a diagram showing the program flow from a user perspective in accordance with a preferred method for operating the system of the present invention via the Inter- 20 net.

FIG. 5 is an overview of the computerized system including the facilitator.

FIG. 6 is a diagram showing program flow from a system 25 perspective for a system including a power round option.

FIG. 7 is an overview of the computerized system including the direct payment interface option.

DETAILED DESCRIPTION OF THE INVENTION

A computerized system for automated dispute resolution accessible on-line, for example through an Internet website via the Internet or other communications linkage, is created for communicating and processing a dispute between two 35 persons using a series of demands to satisfy a claim and a series of offers.

The system compares demands and offers on a round-byround basis in accordance with preestablished conditions.

A"demand" is the amount of money (or equivalent value) required by the person having a claim 2, 3 against another person 4, 5, 6, 7 such as a defendant or his or her insurer, for which the person with the claim would be willing to settle. Information corresponding to the amount of the demand is entered by the claimant, or his or her representative, by using the numbers of a touch-tone or cellular telephone or the keyboard of a personal computer. An "offer" is the amount of money (or suitable value) the defendant or the insurance company will settle the claim.

A person involved in a dispute is anyone or any company who has a claim against another person or against whom another person has asserted a claim, whether litigation is pending or not.

the offers using at least one central processing unit 8 by pairing offers and demands and comparing them. The computer system includes operating system software for controlling the central processing unit 8, a way to introduce information into the central processing unit 8, and memory 60 9 for storing the information.

The basic preestablished conditions under which the comparison is made include the following:

If the offer in any round is less than the demand and within a preestablished percentage, for example thirty percent, of 65 the demand in the same round, i.e. the offer is greater than, or equal to seventy percent of the demand, the claim is

settled for an amount in accordance with a first preestablished formula, for example, the median amount between the demand and the offer.

If the offer in any round is the same as or greater than the demand, the claim is settled for the demand amount.

If the offer is not within the preestablished percentage of the demand in all rounds, for example if seventy percent of the demand is greater than the offer, the claim is not settled unless the difference between the offer and demand is less than a preestablished amount, for example \$5,000, in which case the claim is settled for an amount in accordance with a second preestablished formula, for example at the median amount between the demand and the offer. Thus, first and second preestablished formulas may be the same as or different from each other depending on the agreement of the

The system preferably is designed to allow a user to communicate with the system through a standard PC computer and modem via the Internet. The system may also include a voice message system or voice message generator to allow a person communicating with the system to do so through a touch-tone or cell phone linkage or to guide the person in the use of the system. Security is preferably included to make the system inaccessible without entry of the proper information, for example, a case identification number identifying the dispute, a security code corresponding to the dispute, and a user security code corresponding to the dispute and identifying the user, the user being the person or representative thereof who is making the demand or offer, for example, the attorney for the person on whose behalf the demand or offer is made.

Preferably, the computer is secure, for example by the implementation of a "firewall" or protective barrier against unauthorized traffic or the use of encryption technology, and each case is preferably triple-password protected to assure privacy and prevent unauthorized access. For example, the system may require the user to enter a password or user identification number or alphanumeric combination and a user authorization code providing access control to the system. For increased security, systems may be designed which require user authentication, for example through the use of voice pattern, fingerprints, physical signature, or "smart" card. Advantageously, if the smart card is used, certain embodiments will allow a settlement to be completed by direct transfer of funds onto the claimant's smart card.

Still further advantages may be realized when transfer of the settlement value in resolution of a given dispute can be automatically, if not immediately, be made to the claimant.

We have also recognized that some of the claims which can not be settled using the basic configuration automated dispute resolution arrangement can nonetheless be settled in an efficient automated manner which has similar advantages but removes some of the rigidity of the basic arrangement The system communicates and processes the demands and 55 through the use of either a facilitator, a "power" round or both.

> We have also recognized that yet further advantages may be achieved when a windfall relative to a normal payment is provided to an initiator, i.e. the first adversary to present a particular dispute for resolution. Initiator respondents benefit in a savings because the payment they would make relative to a normal payment for a pair of values is less. Initiator claimants benefit in a windfall increase relative to a normal payment for a pair of values.

> In a fully automated system, strategies, evaluations, or other work product are directly or indirectly disclosed to anyone, including an adverse party and offers and demands

5

that do not result in a settlement are never revealed to anyone. In a system implementing a facilitator, disclosure of information to the facilitation is limited and controlled.

Additional advantages may be achieved when settlement documents are automatically generated by the system for 5 provision to the parties.

FIG. 1 shows the basic system using the Internet or a telephone as the communications linkage.

Preferably, the central processing unit receives the settlement offers and a plaintiff or claimant enters demands in communications with the system within a period of time, for example, 30 days. Time keeping is performed to record the entry of the demands or offers over the selected time period.

Preferably, there will be three offers for each claim in a 15 normal negotiation arrangement. In those instances, each demand will be compared with the offer of the same number (i.e. Demand #1 to offer #1, Demand #2 to offer #2, etc.). The computer matches the settlement offer against the claimant's demand and performs its programmed calcula- 20 multiple telephone calls or other communications from tions in order to determine whether or not a settlement has been achieved. Where the demand and offer intersect in accordance with preestablished conditions, settlement is reached. In the intersection case where the demand is less than or equal to the offer, then the case is settled at a 25 settlement amount equal to the demand. In the intersection case where the demand exceeds the offer, the system will preferably split the difference if the offer is also within a preestablished percentage, for example 70% of the demand (i.e. demand×0.70<=offer). In such case, the settlement 30 amount is calculated to be the median of the two, i.e., the demand plus the offer divided by two. If 70% of the demand is still greater than the offer, there is no settlement unless the difference between the demand and offer is less than a preestablished amount, for example \$5,000, in which case 35 the claim is settled for the median amount between the demand and the offer.

Additionally, as an option a "power round" option may be made available. With a power round, and additional opportunity is given, or a parameter is changed to increase the 40 prospect of a settlement being reached.

Thus, in one type of arrangement, the parties communicate only with the computer which acts as a proxy, always avoiding direct communication with each other for purposes of negotiating a settlement. Wasteful personality conflicts, 45 fruitless and unnecessary disagreements, posturing and positioning cannot occur, so the parties deal exclusively with the "bottom line".

Alternatively, a neutral facilitator may be used to assist with settlement negotiations. The facilitator is a computer or a person operating with, or without a computer, according to particular guidelines. Through the use of generic, nonrevealing statements, the facilitator attempts to induce one or both of the parties to the dispute to adjust their offer(s) or demand(s) into settlement range.

FIG. 2 shows how a claimant involved in a dispute would use the confidential and fully automated system without direct communication with the other side.

The system preferably is also implemented securely so the 60 system is accessible only upon entry of the proper authenticating information, such as a case identification number identifying the dispute, and a user security code corresponding to the dispute and identifying the person or representative thereof who is making the demand or offer.

Preferably, the system is capable of generating voice messages to a person communicating with the system 6

through a touch tone or a cellular phone linkage to guide the person in the use of the system. Alternatively, written messages may be used as prompts when the system is accessed from a personal computer via the Internet.

The entry of claims and settlement offers may also be expedited by a trained staff of computer professionals. For example, the website or telephone linkage can provide a series of options, one of which places the user into on-line or telephone communication with a customer service representative to answer questions or provide other assistance. Thereafter, the user may access the system by communicating to the processing unit via the Internet or by telephone, e.g. a toll-free number, at any time or day of the week to enter claims or settlement offers. Preferably, the system also has time keeping implemented to record the introduction of the information corresponding to the demands or offers over a period of time. In this way, introduction of information corresponding to demands or offers may be made in a plurality of communications with the system over a period of time. The system can of course be configured to handle anywhere in the world.

Depending upon the particular implementation, a currency converter is also included. This allows adversaries to negotiate using different currencies, for example, U.S. dollars, Euros, Pounds, Lira, or Yen, without having to take into account the current exchange rate or negotiate using an unfamiliar currency. When offers or demands are entered in such a system, the system automatically converts the offer and demand into a common currency. Typically, this will be the currency specified by the claimant. Alternatively, the currency used can be based upon a joint selection by the adversaries, for example, a Japanese party and Canadian party could select the Euro as the basic currency of negotiation. The computer performs its functions and the result are reported to the parties as they occur in real time without waiting.

The system includes modules which act as a negotiator proxy. This encourages and enables plaintiffs to take a realistic approach to settlement with no risk of appearing irresolute or hesitant since a claimant's financial demands that do not result in a settlement are never disclosed. Preferably, in the normal course, claimants have only three or some other previously agreed-upon number of opportunities or rounds to settle claims using the system, and preferably settlement offers or rounds have only a limited period or "shelf life" in which they are operable, for example thirty days for all rounds, which encourages prompt action by claimants.

The system preferably also collects and processes settle-50 ment data generated from a settlement reached through the operation of the system for dissemination and use by users, for example sponsors and claimants, in establishing the settlement value of future cases. Settlement data may also be used by facilitators in prompting one or both parties to adjust 55 the amount they propose for settlement. Means may be provided for a user to access actual settlements achieved through the use of the system in other disputes, for example, through a menu or voice choice provided to the user via telephone or the Internet whose selection provides the user with information about prior settlements. The data may be tabulated in the memory so as to be accessible by certain categories, for example by court, by sponsor, by geographic location, or by other category. In this way, a user of the system can be guided in making demands and offers by actual settlements reached in similar cases.

Since the system is accessible via telephone and/or the internet, claimants need not have an attorney in order to